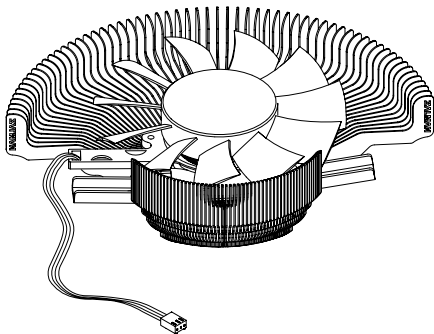


User's Manual

(English version)



Quiet VGA Cooler

Model : VF700-Cu(AICu)

Please visit our website and watch the VF700 installation video for easy installation.

- ※ Please read this manual thoroughly before installation.
- ※ The specifications of this product and its components may change without prior notice to improve performance.

<http://www.zalman.co.kr> <http://www.zalmanusa.com>

Cautions on Use and Installation

1. Please read this manual thoroughly before installation.
2. After installing this product on a VGA(Video Graphics Array) card, a PCI slot adjacent to the AGP (or PCIe) slot will become unusable.
3. Should you install this product on a newly released VGA card, please check for compatibility at Zalman's website first.
4. This product is not compatible with Matrox VGA cards and NVIDIA PCX 5*** VGA cards.
5. If the VGA card and its components interfere with the installation of this product, stop the installation, refer to the list of compatible VGA cards at Zalman's website and install this product with one of the compatible VGA cards.
6. To enhance the performance of this product, using a rear case fan is recommended.
7. Zalman is not responsible for any problems arising from incorrect installation.
8. Zalman Tech Co., Ltd. is not responsible for any damages due to external causes, including but not limited to, improper use, problems with electrical power, accident, neglect, alteration, repair, improper installation, or improper testing.

Product Features

1. Pure copper and/or aluminum ensures excellent heat dissipation.
2. Fan installed in the heatsink (FHS) cools not only the VGA chipset and VGA RAM, but all other VGA components as well.
3. Does not generate noise or vibration in Silent Mode.
4. Silent Mode and Normal Mode selection provided to accommodate the user's environment and preference.

Specifications

1. Specifications

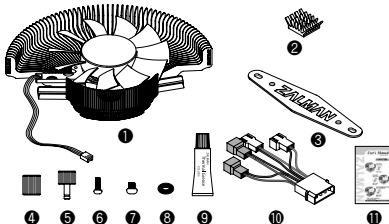
	VF700-AICu	VF700-Cu
Weight (g)	180	270
Cooling Material	Pure Aluminum+Pure Copper	Pure Copper
Dimensions (mm)	91(L) x 126.4(W) x 30(H)	

2. Fan

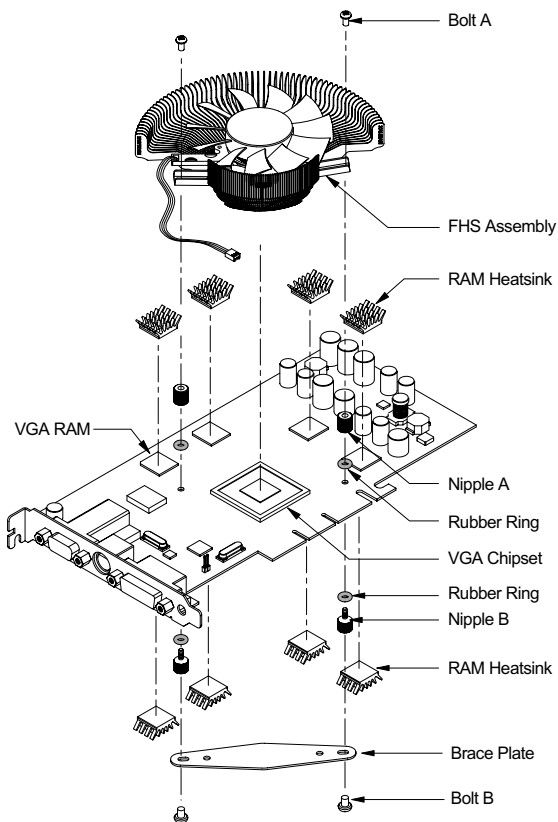
- Size : 80(L) x 80(W) x 15(H)mm
- Bearing Type : 2-Ball
- Speed : 1,350rpm \pm 10%(Silent Mode), 2,650rpm \pm 10%(Normal Mode)
- Noise Level : 18.5dB \pm 10%(Silent Mode), 28.5dB \pm 10%(Normal Mode)

Components

1. FHS Assembly
2. Eight (8) RAM Heatsinks
3. One (1) Brace Plate
4. Two (2) Nipple 'A'
5. Two (2) Nipple 'B'
6. Four (4) Bolt 'A' (ϕ 3 x 5mm)
7. Four (4) Bolt 'B' (ϕ 4 x 4mm)
8. Six (6) Rubber Rings
9. Thermal Grease
10. One (1) Multi-Connector
11. User's Manual



Exploded View



Installation Procedure

※ The following installation sequence **MUST** be followed.

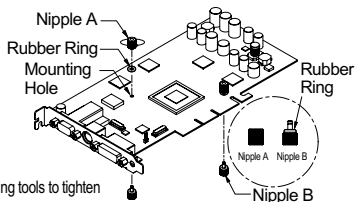
(Nipple A and B → Brace Plate → VGA RAM Heatsinks → Thermal Grease Application → VGA Cooler → VGA Card → Supply Power)

1. Install the Nipples 'A' and 'B'

Check VGA card for compatible installation hole positions.

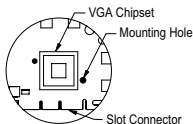
Install nipple 'A' and nipple 'B' on the heatsink Mounting Holes as shown in the diagram. Remember to use rubber rings in between.

Notes) The Nipples **MUST** be tightened by hand. Using tools to tighten the nipples may break the tip of the nipples.

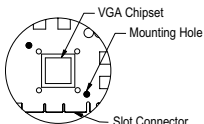


Nipple Installation Holes for Various VGA Cards

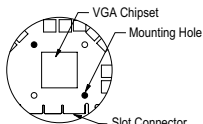
The Nipples must be installed through the mounting holes indicated with black holes (●) as shown in the diagram.



ATI Radeon 9 *** Series
ATI Radeon X *** Series
NVIDIA Geforce4 MX Series
NVIDIA Geforce FX 5200
NVIDIA Geforce FX 5500
NVIDIA Geforce FX 5600(FX 5700)



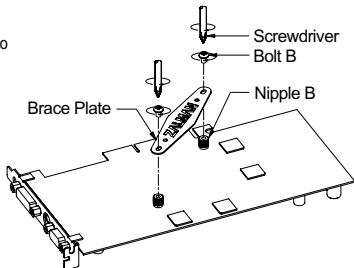
NVIDIA Geforce4 Ti 4 *** Series
NVIDIA Geforce FX 5700(Ultra) Series
NVIDIA Geforce FX 5800 Series
NVIDIA Geforce FX 5900 Series
NVIDIA Geforce FX 5950 Series
NVIDIA Geforce 6600 Series



NVIDIA Geforce 6800 LE Series
NVIDIA Geforce 6800 Series
NVIDIA Geforce 6800 GT Series
NVIDIA Geforce 6800 Ultra Series
NVIDIA Geforce 6800 Ultra Extreme

2. Install the Brace Plate

Use each Bolt B to attach the brace plate to each Nipple B as shown in the diagram.



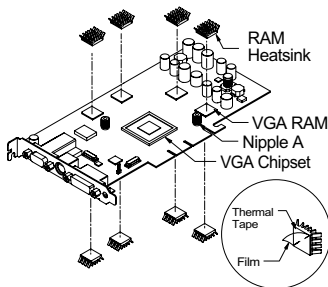
3. Attach the VGA RAM Heatsinks

Remove the film from the thermal tapes on the bottom of the RAM Heatsinks and attach the heatsinks on the VGA RAM.

Note 1) If thermal grease or other residue remains on the RAM, the thermal tapes will not stick. Clean the surface of the RAM with acetone or alcohol before attaching.

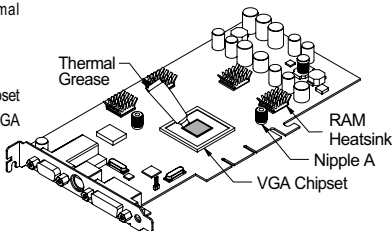
Note 2) The bonding strength of the thermal tapes reaches 90% after 24 hours of curing. Do not put excessive force on the RAM heatsinks during this period.

Note 3) Thermal tapes lose adhesiveness after it has been used for attachment once and cannot be reused. Purchase thermal tapes separately should you try again.



4. Apply Thermal Grease

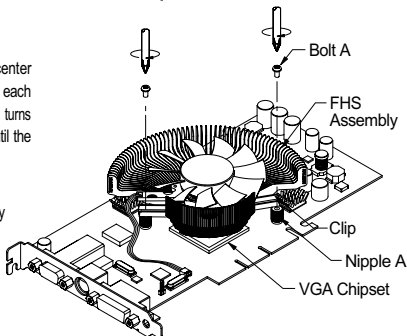
Clean the contact surface of the VGA Chipset completely. Apply thermal grease on the VGA Chipset that makes contact with the base of the FHS assembly.



5. Install the FHS Assembly

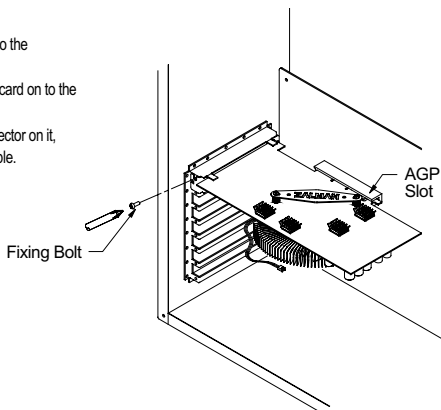
Align the FHS assembly's base on the center of the VGA Chipset. Screw each Bolt A on each Nipple A slightly, and tighten each Bolt A a few turns at a time, alternating between each bolt, until the clip is completely attached to each Nipple A.

Notes) Make sure that the heatsink's base and the VGA Chipset are completely in contact with each other.



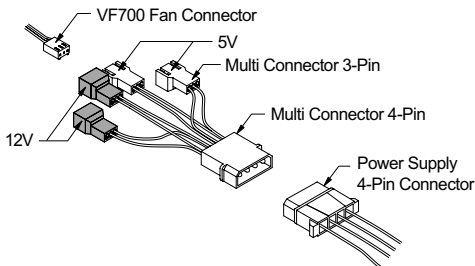
6. Install the VGA Card

Insert the assembled VGA card into the motherboard's AGP (or PCIe) slot.
Use the Fixing Bolt to fix the VGA card on to the computer case.
If the VGA card has a power connector on it, remember to plug in the power cable.



7. Supply Power to the Fan

Connect the Multi-Connector to the power supply's 4-pin connector as shown in the diagram.



	Silent Mode (5V)	Normal Mode (12V)
Speed	1,350rpm \pm 10%	2,650rpm \pm 10%
Noise	18.5dB \pm 10%	28.5dB \pm 10%

Zalman Noise Prevention Systems

When building a noiseless computer, use Zalman's Noiseless CPU Cooler, Noiseless Power Supply, Noiseless Case Fan, Noiseless Northbridge Cooler, and Heatpipe HDD Cooler for stable performance and a noiseless environment.



Quiet CPU Cooler



Noiseless Power Supply



Heatpipe HDD Cooler



Fanless Northbridge Cooler



Noiseless Case Fan

TNN (Totally No Noise) Computer Case



The TNN 500AF is the world's first absolutely **noiseless, anti-dust computer case** for high-end systems that has been developed with Heatpipe Technology, HSC (Heat Source Contact) Power Technology, High Capacity Extrusion Technique, and FMS (Flexible Mounting Structure) Design Technology by ZALMAN Tech Co., Ltd.

The TNN 500AF package includes a high performance aluminum computer case with an absolutely noiseless cooling solution that does not require the use of a fan, making it ideal for:

1. **Digital Audio Workstations (DAW)** in broadcasting, recording, and postproduction studio control rooms.
2. **Multi Media & Storage Servers** for offices, educational facilities, and hotels.
3. **Home Theater and Multi-Media Systems** for living rooms.
4. **High Performance Noiseless Workstations & Servers** for SOHO (Small Office Home Office) systems.

For more information, please visit our website.